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EXAMINER	
HEINCER, LIAM J	

ART UNIT	PAPER NUMBER
1796	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,038	MAYNARD ET AL.	
	Examiner	Art Unit	
	Liam J. Heincer	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *15-19* is/are allowed.

6)☒ Claim(s) *1-14 and 20-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 6 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 6 has been amended such that it reads "a non-interacting initiator which does not bind to the protein is added along with the protein modifying initiator". This does not appear to have support in the specification. In fact, the original specification seems to indicate that the non-interacting initiator is contemplated to be added to a protein that has already been modified with an initiator (¶0064, original claim 15).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 22 is rejected under 35 U.S.C. 102(a) as being anticipated by Heredia et al. (J. Am. Chem. Soc. 2005, 127, 16955-16960).

Considering Claim 22: Heredia et al. teaches a method for forming a polymer-biomacromolecule conjugate (abstract) comprising reacting a monomer (pg. 16959) with sites on lysozyme (pg. 16959) that have been modified to include polymerization initiation sites (pg. 16959),

Claims 11 and 12 are rejected under 35 U.S.C. 102(a) as being anticipated by Heredia et al. (J. Am. Chem. Soc. 2005, 127, 16955-16960).

Considering Claims 11 and 12: Heredia et al. teaches a method for forming a protein polymer conjugate comprising modifying the protein to have functionality suitable for initiation of radical polymerization (pg. 16957) and reacting the modified protein with the monomer (pg. 16957). Heredia et al. further teaches the protein as being reduced with tris(2-carboxyethyl) phosphine hydrochloride to produce additional thiols on the protein (pg. 16957), modifying the protein by reacting with pyridyl disulfide in the presence of 2-bromoisobutyrate functionalized resin (pg. 16957, scheme 1(b)), capping any unmodified thiols with maleimide to form a macroinitiator (pg. 16957) and reacting the macroinitiatoir with a monomer to form the conjugate (pg. 16957).

Claims 1-3, 5, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Gololobov et al. (US Pat. 6,433,078).

Considering Claims 1 and 21: Gololobov et al. teaches a method for forming a polymer-enyzme/biomacromolecule conjugate (4:19-23) comprising reacting a monomer (4:45-21) with sites on the enzyme modified to include polymerization initiation sites (4:36-43). The method of Golobov et al. results in products with one biomolecule attached to one or more polymer chains (Example 6).

Considering Claims 2 and 3: Gololobov et al. teaches the enzyme/protien as having amino acids (4:36-43).

Considering Claim 5: Gololobov et al. teaches filtering the conjugate/removing unreacted starting materials (8:43-47).

Claims 9 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Gololobov et al. (US Pat. 6,433,078).

Considering Claim 9: Gololobov et al. teaches a method for forming a polymer-enyzme/protein conjugate (4:19-23) comprising reacting a monomer (4:45-21) with sites on the enzyme modified to include vinyl groups/functionality for radical initiation (4:36-43).
Considering Claims 13: Gololobov et al. teaches the monomer as being N-isopropylacrylamide.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gololobov et al. (US Pat. 6,433,078) as applied to claim 3 above, and further in view of Matyjaszewski et al. (US 5,789,487).
Considering Claim 4: Gololobov et al. teaches the method of claim 3 as shown above.

Gololobov et al. does not teach the modified polymerisazition site as being an initiator. However, Matyjaszewski et al. teaches an atom transfer radical polymerization initiator as being attached to a macromolecule (17:25-59). Gololobov et al. and Matyjaszewski et al. are combinable as they are concerned with a similar technical difficulty, namely grafting acrylate monomers onto a macromolecule. It would have been obvious to a person having ordinary skill in the art at the time of invention to have used the initator of Matyjaszewski et al. as the

polymerization site of Gololobov et al., and the motivation to do so would have been, as Matyjaszewski et al. suggests, atom transfer radical polymerization has a uniform growth on all chains (4:60-5:9).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gololobov et al. (US Pat. 6,433,078) in view of Matyjaszewski et al. (US 5,789,487).
Considering Claim 8: Gololobov et al. teaches a method for forming a polymer-enyzme/protein conjugate (4:19-23) comprising reacting a monomer (4:45-21) with sites on the enzyme modified to include reactive sites (4:36-43).

Gololobov et al. does not teach the modified polymerisazition site as being an initiator. However, Matyjaszewski et al. teaches an atom transfer radical polymerization initiator as being attached to a macromolecule (17:25-59). Gololobov et al. and Matyjaszewski et al. are combinable as they are concerned with a similar technical difficulty, namely grafting acrylate monomers onto a macromolecule. It would have been obvious to a person having ordinary skill in the art at the time of invention to have used the initator of Matyjaszewski et al. as the polymerization site of Gololobov et al., and the motivation to do so would have been, as Matyjaszewski et al. suggests, atom transfer radical polymerization has a uniform growth on all chains (4:60-5:9).

Claims 9, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gololobov et al. (US Pat. 6,433,078) in view of Matyjaszewski et al. (US 5,789,487).
Considering Claims 9 and 10: Gololobov et al. teaches a method for forming a polymer-enyzme/protein conjugate (4:19-23) comprising reacting a monomer (4:45-21) with sites on the enzyme modified to include vinyl groups/functionality for radical initiation (4:36-43).

Gololobov et al. does not teach the modified polymerisazition site as being an initiator. However, Matyjaszewski et al. teaches an atom transfer radical polymerization initiator as being attached to a macromolecule (17:25-59). Gololobov et al. and Matyjaszewski et al. are combinable as they are concerned with a similar technical difficulty, namely grafting acrylate monomers onto a macromolecule. It would have been obvious to a person having ordinary skill in the art at the time of invention to have used the initator of Matyjaszewski et al. as the polymerization site of Gololobov et al., and the motivation to do so would have been, as Matyjaszewski et al. suggests, atom transfer radical polymerization has a uniform growth on all chains (4:60-5:9).

Considering Claims 13: Gololobov et al. teaches the monomer as being N-isopropylacrylamide.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gololobov et al. (US Pat. 6,433,078) as applied to claim 9 above, and further in view of Matyjaszewski et al. (US 5,789,487).

Considering Claim 10: Gololobov et al. teaches the method of claim 9 as shown above.

Gololobov et al. does not teach the modified polymerisazition site as being an initiator. However, Matyjaszewski et al. teaches an atom transfer radical polymerization initiator as being attached to a macromolecule (17:25-59). Gololobov et al. and Matyjaszewski et al. are combinable as they are concerned with a similar technical difficulty, namely grafting acrylate monomers onto a macromolecule. It would have been obvious to a person having ordinary skill in the art at the time of invention to have used the initator of Matyjaszewski et al. as the polymerization site of Gololobov et al., and the motivation to do so would have been, as Matyjaszewski et al. suggests, atom transfer radical polymerization has a uniform growth on all chains (4:60-5:9).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gololobov et al. (US Pat. 6,433,078) in view of Matyjaszewski et al. (Chem. Rev. 2001, 101, 2921-2990) as applied to claim 9 above, in view of Jansen et al. (US Pat. 4,980,457).

Considering Claim 14: Gololobov et al. and Matyjaszewski et al. collectively teach the method of claim 9 as shown above. Gololobov et al. also teaches the monomer as being N-isopropylacrylamide.

Gololobov et al. does not teach attaching the functional group through the propyl mecrapto pyridine group of the instant claim. However, Jansen et al. teaches attaching functional groups to a polymer through a disulfide group activated by a pyridine group. Gololobov et al. and Jansen et al. are combinable as they are concerned with a similar technical difficulty, namely functionalizing proteins. It would have been obvious to a person having ordinary skill in the art at the time of invention to have used the activated disulfide of Jansen et al. in the method of Gololobov et al., and the motivation to do so would have been, as Jansen et al. suggests, to allow the functionalizing agent to reacted with the thiols of the protein.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gololobov et al. (US Pat. 6,433,078) in view of Matyjaszewski et al. (US 5,789,487).

Considering Claim 20: Gololobov et al. teaches a polymer-enyzme/protein conjugate (4:19-23) comprising reacting a monomer (4:45-21) with sites on the enzyme modified to include reactive sites (4:36-43).

Gololobov et al. does not teach the modified polymerisazition site as being an initiator. However, Matyjaszewski et al. teaches an atom transfer radical polymerization initiator as being attached to a macromolecule (17:25-59). Gololobov et al. and Matyjaszewski et al. are combinable as they are concerned with a similar technical difficulty, namely grafting acrylate monomers onto a macromolecule. It would have been obvious to a person having ordinary skill in the art at the time of invention to have used the initator of Matyjaszewski et al. as the polymerization site of Gololobov et al., and the motivation to do so would have been, as Matyjaszewski et al. suggests, atom transfer radical polymerization has a uniform growth on all chains (4:60-5:9).

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gololobov et al. (US Pat. 6,433,078) as applied to claims 2 and 21 above, and further in view of Hoffman et al. (US Pat. 5, 988, 588).

Gololobov et al. teaches the method of claims 2 and 21 as shown above.

Considering Claim 22: Gololobov et al. does not teach the enzyme as being lysozyme. However, Hoffman et al. teaches using lysozyme in a polymer-bimolecule conjuage (10:20-25). Gololobov et al. and Hoffman et al. are combinable as they are concerned with the same field of endeavor, namely polymer-enyzme conjugates. It would have been obvious to a person having ordinary skill in the art at the time of invention to have used lysozyme in the conjugate of Gololobov et al. as in Hoffman et al., and the motivation to do so would have been, as Hoffman et al. suggests, lysozyme is pH sensitive, providing a environmentally responsive conjugate (10:20-25).

Considering Claim 23: Gololobov et al. does not teach the biomolecule as being an antibody. However, Hoffman et al. teaches using antibodies in polymer-biomolecule conjugates (3:2-8). It would have been obvious to a person having ordinary skill in the art at the time of invention to have used an antibody in the conjugate of Gololobov et al. as in Hoffman et al., and the motivation to do so would have been, as Hoffman et al. suggests, antibodies are presented as being functionally equivalent to enzymes in the conjugate (3:2-8).

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bontempo et al. (J. Am. Chem. Soc. 2004, 126, 15372-15373).

Considering Claim 11: Bontempo et al. teaches a method of forming a polymer-boimacromolecule conjugate (pg. 15372) by modifying a protein with ATRP initiator, then polymerizing the modified protein with a monomer (pg. 15372). Bontempo et al. also teaches conjugate as having one protein (scheme 1). Bontempo et al. also teaches modifying the protein to provide free cysteines/thiols (pg. 15372).

Considering Claim 12: Bontempo et al. teaches the intiator as being pyridyl disulfide functional (pg. 15372).

Bontempo et al. does not teach the protein as being reduced with tris-(2-carboxyethyl) phosphine dichloride. However, it is common practice in the art to modify proteins with tris-(2-carboxyethyl) phosphine dichloride to generate free cysteines (applicant's arguments July 28, 2008, page 6). It would have been obvious to a person having ordinary skill in the art at the time of invention to have used this practice to generate the free thiols, and the motivation to do so would have been to generate reactive sites in the polymer.

Bontempo et al. does not teach capping the polymer with maleimide. However, it is common practice to cap free cysteine with maleimide (applicant's arguments July 28, 2008, page 6). It would have been obvious to a person having ordinary skill in the art at the time of invention to have used this practice to cap the free cysteine and the motivation to do so would have been to prevent further reaction of the cysteine.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO form 892.

Allowable Subject Matter

Claims 15-19 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art of record does not disclose a bromoisobutyrate-modified solid phase resin being used in a process of modifying a protein with a bromoisobutyrate-modified ligand initiator. Kroner et al. teaches adding a water-insoluble non-interactive initiator to remove the remaining monomers in a graft polymerization process for forming a protein polymer graft copolymer. However, there is nothing in the prior art of record to suggest using the bromoisobutyrate-modified solid phase resin as the water-insouble non-interacting initiator of claim 15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's arguments filed July 28, 2008 have been fully considered but they are not persuasive, because:

A) Applicants argument that claims 11, 12, and 22 have support in the specification is not persuasive.

With regard to claim 11, while the PCT supports reacting free thiols with the initiator (Abstract) and that cysteine residues can be used as an anchoring point (¶0014), there is no support for chemically modifying the protein to create free thiols sites on the polymer. Additionally, the fact that the reduction of two cysteines joined together produces a free thiol is known is not germane, as the PCT does not provide support for reducing two cysteines to produce a free cysteine. Finally, the disclosure in the PCT of modifying the protein to contain sites for initiation is not sufficient to teach the species of modifying the protein to create free thiol groups. See MPEP § 2163.05(II).

With regard to claim 12, the fact that it is known to generate free cysteines using tris-2-carboxyethyl phosphine hydrocholride and that maleimide is a known way to cape a free cysteine is not germane as the issue is whether these method steps are supported by the PCT as filed, not whether they are obvious to a person having ordinary skill in the art at the time of invention. However, this admission is being considered as evidence that the claimed methods steps are common practice in the art.

With regard to claim 22, the disclosure of a genus is not sufficient to support a specific species. See MPEP § 2163.05(II).

With regard to claims 21 and 23, applicant has shown that the enzymes and antibodies are supported in ¶0038 of the PCT application, and therefore the claims are being given the PCT filing date.

B) Applicants allegation that the Heredia et al. reference is not "by another" is not sufficient to remove the reference as prior art. A *prima facie* case is made out under 35 U.S.C. 102(a) if, within 1 year of the filing date, the invention, or an obvious variant thereof, is described in a "printed publication" whose authorship differs in any way from the inventive entity unless it is

stated within the publication itself that the publication is describing the applicant's work. *In re Katz*, 687 F.2d 450, 215 USPQ 14 (CCPA 1982). See MPEP § 2132.01. As the reference differs in authorship by four people, a prima facie case that the invention qualifies as prior art under 35 U.S.C. 102(a) has been established.

An applicant can rebut a prima facie case by showing the reference's disclosure was derived from applicant's own work. This can be accomplished by a disclaiming affidavit by the co-authors of the reference, addition of the co-authors to the inventorship, or through a submission of a specific declaration by the applicant establishing that the article is describing applicant's own work. See MPEP § 2132.01. The declaration of inventorship is insufficient to overcome the prima facie case as it does not relate to the cited reference. As the applicant has not successfully rebutted the prima facie case, the reference is being maintained as prior art.

C) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., initiator sites on the protein) are not recited in the rejected claim(s), 1-3, 5, and 21. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claims 1-3 and 5 currently require only "initiation sites" not initiator sites. During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." See MPEP 2111. The broadest reasonable interpretation of initiation sites include sites were the initiation of the polymerization can occur. The claim is not limited to groups that can themselves initiate the polymerization reaction. As free radical initiation can occur at the double bond attached to the proteins of Gololobov et al., Gololobov et al. is considered to contain initiation sites.

D) Applicant's argument that Gololobov et al. does not teach conjugates including a single biomolecule attached to one or more polymer chains is not persuasive. Gololobov et al. teaches removing the conjugates comprising multiple enzymes (Example 6). Thus, as some conjugates are still present after the removal of the conjugates with multiple enzymes, Gololobov et al. inherently teaches that conjugates having only one biomolecule are present in their final product.

Additionally, the term "including" is a synonym of comprising. As the term comprising indicates that the conjugate can include additional elements, the conjugate as currently

claimed is not limited to conjugates containing only one biomolecule. The claim only requires that the conjugate contains at least one biomolecule. See MPEP § 2111.03.

E) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the advantages of the instant invention over Gololobov et al.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

F) In response to applicant's argument that Gololobov et al. and Matyjaszewski et al. are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Gololobov et al. and Matyjaszewski et al. are analogous as they are concerned with a similar technical difficulty, namely grafting acrylate monomers onto a macromolecule. Gololobov et al. (10:7-15) and Matyjaszewski et al. (17:64-18:20) both teach polymerizing acrylate monomers onto a macromolecule that has been modified to be reactive with the monomers. Addtionally, both Gololobov et al. (4:36-43) and Matyjaszewski et al. (17:45-63) teach modifying a polymer having an amine group with a group to provide a site for the growth of the graft chain. As such a person having ordinary skill in the art at the time of invention would have found the teachings of Matyjaszewski et al. to be applicable to the invention of Gololobov et al., and would have had a reasonable expectation of success when combining the analogous references.

G) In response to applicant's argument that Gololobov et al. and Janssen et al. are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Gololobov et al. and Jansen et al. are analogous art as they are concerned with the same technical difficuly, namely functionalizing proteins. Although it is concerned with a different field of endeavor, Jansen et al. is concerned with a similar technical difficulty as Gololobov et al., namely attaching a group onto a protein, a person having ordinary skill in the art at the time of invention would have looked to Janssen when looking for methods of attaching a functional group to the protein of Gololobov et al.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liam J. Heincer whose telephone number is 571-270-3297. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo, Ph.D./ LJH

Supervisory Patent Examiner, Art Unit 1796 October 10, 2008